

CLAIMS

- [001] 1. A dryer with a housing (1), a rotary drum (2) for receiving laundry and a bearing (9) for swivelling the drum (2) in the housing (1), characterised in that a cooling device is provided for cooling the bearing (9).
- [002] 2. The dryer according to claim 1, characterised in that the cooling device comprises means for improving the radiation or convection of heat from the bearing (9) and/or from an area adjacent to the bearing, and/or in that cooling faces (10) are provided which are thermally and conductively connected to the bearing (9)
- [003] 3. The dryer according to claim 1 or 2, characterised in that the cooling device has a device for feeding cooling air, preferably ambient air, to the bearing (9).
- [004] 4. The dryer according to any one of claims 1 to 3, characterised in that a fan (22, 37) is provided for conveying process air through the drum (2) and/or for conveying cooling air for a condenser (35), and in that the fan (22,37) serves as a device for conveying cooling air to the bearing (9).
- [005] 5. The dryer according to claim 4, characterised in that a process air conduit (15) is provided, wherein a section of the process air conduit and/or the drum (2)) is loaded with a vacuum by the conveying action of the fan (22), and forms a vacuum space, and in that a cooling conduit is provided between the vacuum space and the bearing (9), so that air is sucked in the form of ambient air adjacent to the bearing (9) and can be fed as spent air to the process air.
- [006] 6. The dryer according to any one of the preceding claims 1 to 5, characterised in that the bearing (9) has a bracket (10) which is secured to the housing (1), in that a process air conduit comprises an air distribution hood (18) adjacent to the bearing (9), which hood covers the process air inlet holes (19) in the drum (2), and in that a cooling air conduit is formed between the air distribution hood (18) and the bracket (10) in the form of an annular gap (33).

- [007] 7. The dryer according to claim 6, characterised in that the annular gap (33) is arranged around the bearing (9).
- [008] 8. The dryer according to claim 4, characterised ion that a process air conduit (15) is provided, wherein a section of the process air conduit (15) and/or the drum (22) is loaded with a vacuum by the conveying action of the fan (22), and forms an excess pressure space, and in that a cooling conduit is provided between the excess pressure space and the bearing (9) so that some of the conveyed air is fed to the bearing (9) in order to cool the bearing (9).
- [009] 9. The dryer according to any one of claims 1 to 8, characterised in that a process air conduit (15) is provided as a circuit with a condenser (35) which is cooled by a cooling air flow (36), and in that some of the cooling air flow (36) is branched and fed via a cooling air conduit (41) to the bearing (9) in order to cool the bearing (9).
- [010] 10. The dryer according to any one of claims 5 to 9, characterised in that the quantity of cooling air for the bearing (9) can be determined by the dimension of the cooling conduit (41, 33).